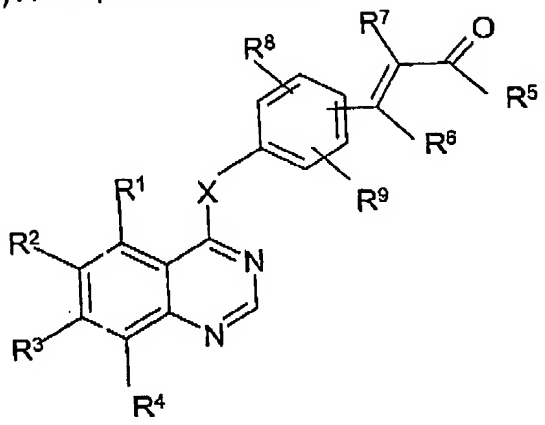
Application No. 10/088,352
Amendment Dated 27th June 2005
Reply to Office Action of 28th November 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A compound of formula (I)



(I)

or a salt, or phosphate ester, ~~or amide~~ thereof;

where X is O, or S, S(O) or $S(O)_2$ or NR^{10} where R^{10} is hydrogen or C_{1-6}alkyl;

R^5 is a group OR^{11}, $NR^{12}R^{13}$ or SR^{11} where R^{11}, R^{12} and R^{13} are independently selected from hydrogen, optionally substituted hydrocarbyl where optional substituents are functional groups, or optionally substituted heterocyclic groups where optional substituents are functional groups or hydrocarbyl, and R^{12} and R^{13} may additionally form together with the nitrogen atom to which they are attached, an optionally substituted aromatic or non-aromatic heterocyclic ring which may contain further heteroatoms;[[,]]

R^6 and R^7 are independently selected from hydrogen or hydrocarbyl;

R^8 and R^9 are independently selected from hydrogen, halo, C_{1-4} alkyl, C_{1-4}alkoxy, C_{1-4}alkoxymethyl, di(C_{1-4}alkoxy)methyl, C_{1-4}alkanoyl, trifluoromethyl, cyano, amino, C_{2-5}alkenyl, C_{2-5}alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms[[,]] selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated, linked via a ring carbon or nitrogen atom, or unsaturated, linked via a ring carbon atom, [[,]] and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C_{2-4}alkanoyl, C_{1-4}alkanoylamino, C_{1-4}alkoxycarbonyl, C_{1-4}alkylsulphanyl, C_{1-4}alkylsulphinyl, C_{1-4}alkylsulphonyl, carbamoyl, N-C_{1-4}alkylcarbamoyl, N,N-di(C_{1-4}alkyl)carbamoyl,

aminosulphonyl, N-C_{1-4}alkylaminosulphonyl, N,N-di(C_{1-4}alkyl)aminosulphonyl, C_{1-4}alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C_{1-4}alkoxycarbonyl;[[,]] and

R^1, R^2, R^3, R^4 are independently selected from halogeno, cyano, nitro, C_{1-3}alkylsulphanyl, -N(OH)R^{14}[[,]] wherein R^{14} is hydrogen[[,]] or C_{1-3}alkyl, [[,]] or $R^{16}X^1$- wherein X^1 represents a direct bond, -O-, -CH_2-, -OC(O)-, -C(O)-, -S-, -SO-, -SO_2-, -NR^{17}C(O)-, -C(O)NR^{18}-, -SO_2NR^{19}-, -$NR^{20}SO_2$- or -NR^{21}-, wherein R^{17}, R^{18}, R^{19}, R^{20} and R^{21} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, [[,]] and R^{16} is ~~hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy~~ selected from one of the following twenty-two groups:

1) hydrogen or C_{1-5}alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, oxiranyl, fluoro, chloro, bromo, amino, C_{1-3}alkyl, and trifluoromethyl;

2) -$R^aX^2C(O)R^{22}$; wherein X^2 represents -O- or -NR^{23}-, in which R^{23} represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl) and R^{22} represents C_{1-3}alkyl, -$NR^{24}R^{25}$ or -OR^{26}, wherein R^{24}, R^{25} and R^{26} which may be the same or different each represents hydrogen, C_{1-5}alkyl, hydroxyC_{1-5}alkyl or C_{1-3}alkoxyC_{2-3}alkyl;

3) -$R^bX^3R^{27}$; wherein X^3 represents -O-, C(O) -S-, -SO-, -SO_2-, -OC(O)-, -NR^{28}C(O)-, -NR^{28}C(O)O-, -C(O)NR^{29}-, C(O)NR^{29}-, -SO_2NR^{30}-, -$NR^{31}SO_2$- or -NR^{32}-, wherein R^{28}, R^{29}, R^{30}, R^{31} and R^{32} each independently represents hydrogen, C_{1-3}alkyl, hydroxy C_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{27} represents hydrogen, C_{1-6}alkyl, C_{2-6}alkenyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C_{1-6}alkyl group may bear 1, 2 or 3 substituents selected from oxo, hydroxy, halogeno, cyclopropyl, amino, C_{1-4}alkylamino, C_{1-4}alkanoyldi-C_{1-4}alkylamino, C_{1-4}alkylthio, C_{1-4}alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4}cyanoalkyl, C_{1-4}alkyl, C_{1-4}hydroxyalkyl, C_{1-4}alkoxy, C_{1-4}alkoxyC_{1-4}alkyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy and a group -(-O-)$_f$($R^{b'}$)$_g$D, wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C_{3-6}cycloalkyl group, an aryl group or a 5-6-membered saturated or unsaturated heterocyclic group with 1-2

heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo or C_{1-4}alkyl;

4) $-R^cX^4R^{c'}X^5R^{35}$; wherein X^4 and X^5 which may be the same or different are each -O-, C(O), -S-, -SO-, $-SO_2$-, $-NR^{36}C(O)$-, $-NR^{36}C(O)O$-, $-C(O)NR^{37}$-, $-C(O)ONR^{37}$-, $-SO_2NR^{38}$-, $-NR^{39}SO_2$- or $-NR^{40}$-, wherein R^{35}, R^{37}, R^{38}, R^{39} and R^{40} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{35} represents hydrogen, C_{1-3}alkyl, hydroxyC_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl;

5) R^{41}; wherein R^{41} is a 4-6-membered cycloalkyl or saturated heterocyclic ring, linked via carbon or nitrogen, with 1-2 heteroatoms, selected independently from O, S and N, which cycloalkyl or heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4}alkyl, hydroxyC_{1-4}alkyl, cyanoC_{1-4}alkyl, cyclopropyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, carboxamido, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, C_{1-4}alkanoyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy nitro, amino, C_{1-4}alkoxy, C_{1-4}hydroxyalkoxy, carboxy, trifluoromethyl, $-C(O)NR^{43}R^{44}$, $-NR^{45}C(O)R^{46}$, wherein R^{43}, R^{44}, R^{45} and R^{46}, which may be the same or different, each represents hydrogen, C_{1-4}alkyl, hydroxyC_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl) and a group $-(-O-)_f(C_{1-4}$alkyl)$_g$ringD, wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C_{3-6}cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl;

6) $-R^dR^{41}$; wherein R^{41} is as defined hereinbefore;

7) $-R^eR^{41}$; wherein R^{41} is as defined hereinbefore;

8) $-R^fR^{41}$; wherein R^{41} is as defined hereinbefore;

9) R^{42}; wherein R^{42} represents a phenyl group or a 5-6-membered aromatic heterocyclic group, linked via carbon or nitrogen, with 1-3 heteroatoms selected from O, N and S, which phenyl or aromatic heterocyclic group may carry up to 5 substituents selected from hydroxy, nitro, halogeno, amino, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}hydroxyalkyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, C_{1-4}hydroxyalkoxy, oxo, cyanoC_{1-4}alkyl, cyclopropyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, C_{1-4}alkanoyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy, carboxy, carboxamido, trifluoromethyl, cyano, $-C(O)NR^{69}R^{70}$, $-NR^{71}C(O)R^{72}$, wherein R^{69}, R^{70}, R^{71} and R^{72}, which may be the same or different, each represents hydrogen, C_{1-4}alkyl, hydroxyC_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and a group $-(-O-)_f(C_{1-4}$alkyl)$_g$ringD, wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C_{3-6}cycloalkyl, aryl or 5-6-membered saturated or unsaturated

heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl;

10) $-R^{g}R^{42}$; wherein R^{42} is as defined hereinbefore;

11) $-R^{h}R^{42}$; wherein R^{42} is as defined hereinbefore;

12) $-R^{i}R^{42}$; wherein R^{42} is as defined hereinbefore;

13) $-R^{j}X^{6}R^{42}$; wherein X^{6} represents -O-, -C(O)-, -S-, -SO-, $-SO_2$-, -OC(O)-, $-NR^{47}C(O)$-, $-C(O)NR^{48}$-, $C(O)ONR^{48}$-, $-SO_2NR^{48}$-, $-NR^{50}SO_2$- or $-NR^{51}$-, wherein R^{47}, R^{48}, R^{49}, R^{50} and R^{51} each independently represents hydrogen, C_{1-3}alkyl, hydroxyC_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

14) $-R^{k}X^{7}R^{42}$; wherein X^{7} represents -O-, C(O), -S-, -SO-, $-SO_2$-, $-NR^{73}C(O)$-, $-C(O)NR^{74}$-, $C(O)ONR^{74}$-, $-SO_2NR^{75}$-, $-NR^{76}SO_2$- or $-NR^{77}$-, wherein R^{73}, R^{74}, R^{75}, R^{76} and R^{77} each independently represents hydrogen, C_{1-3}alkyl, hydroxyC_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

15) $-R^{m}X^{8}R^{42}$; wherein X^{8} represents -O-, -C(O)-, -S-, -SO-, $-SO_2$-, $-NR^{57}C(O)$-, $-C(O)NR^{58}$-, $-SO_2NR^{59}$-, $-NR^{60}SO_2$- or $-NR^{61}$-, wherein R^{57}, R^{58}, R^{59}, R^{60} and R^{61} each independently represents hydrogen, C_{1-3}alkyl, hydroxyC_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

16) $-R^{n}X^{9}R^{n'}R^{42}$; wherein X^{9} represents -O-, -C(O)-, -S-, -SO-, $-SO_2$-, $-NR^{62}C(O)$-, $-C(O)NR^{63}$-, $C(O)ONR^{63}$-, $-SO_2NR^{64}$-, $-NR^{65}SO_2$- or $-NR^{66}$-, wherein R^{62}, R^{63}, R^{64}, R^{65} and R^{66} each independently represents hydrogen, C_{1-3}alkyl, hydroxyC_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

17) $-R^{p}X^{9}-R^{p'}R^{41}$; wherein X^{9} and R^{41} are as defined hereinbefore;

18) C_{2-5}alkenyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C_{1-4}alkylamino, N,N-di(C_{1-4}alkyl)amino, aminosulphonyl, N-C_{1-4}alkylaminosulphonyl and N,N-di(C_{1-4}alkyl)aminosulphonyl;

19) C_{2-5}alkynyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C_{1-4}alkylamino, N,N-di(C_{1-4}alkyl)amino, aminosulphonyl, N-C_{1-4}alkylaminosulphonyl and N,N-di(C_{1-4}alkyl)aminosulphonyl;

20) $-R^{t}X^{9}R^{t'}R^{41}$; wherein X^{9} and R^{41} are as defined hereinbefore;

21) $-R^{u}X^{9}R^{u'}R^{41}$; wherein X^{9} and R^{41} are as defined hereinbefore; and

22) - $R^{v}R^{67}(R^{v'})_q(X^{9})_rR^{68}$; wherein X^{9} is as defined hereinbefore, q is 0 or 1, r is 0 or 1, and R^{67} is a C_{1-3}alkylene group or a cyclic group selected from cyclopropyl, cyclobutyl, cyclopentylene,

cyclohexylene or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C_{1-3}alkylene group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C_{1-4}alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4}cyanoalkyl, C_{1-4}alkyl, C_{1-4}hydroxyalkyl, C_{1-4}alkoxy, C_{1-4}alkoxyC_{1-4}alkyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy and a group -(-O-)$_f$(C_{1-4}alkyl)$_g$ringD, wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C_{3-8}cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl; and R^{68} is hydrogen, C_{1-3}alkyl, or a cyclic group selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C_{1-3}alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-4}alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4}cyanoalkyl, C_{1-4}alkyl, C_{1-4}hydroxyalkyl, C_{1-4}alkoxy, C_{1-4}alkoxyC_{1-4}alkyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy and a group -(-O-)$_f$(C_{1-4}alkyl)$_g$ringD, wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C_{3-8}cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl;

and wherein R^a, R^b, $R^{b'}$, R^c, $R^{c'}$, R^d, R^g, R^j, R^n, $R^{n'}$ R^p, $R^{p'}$, R^r, $R^{u'}$, R^v and $R^{v'}$ are independently selected from C_{1-8}alkylene groups optionally substituted by one or more substituents selected from hydroxy, halogeno, amino,

R^e R^h, R^k and R^t are independently selected from C_{2-8}alkenylene groups optionally substituted by one or more substituents selected from hydroxy, halogeno, amino, and R^t may additionally be a bond; and

R^f, R^i, R^m and R^u are independently selected from by C_{2-8}alkynylene groups optionally substituted by one or more substituents selected from hydroxy, halogeno, amino;

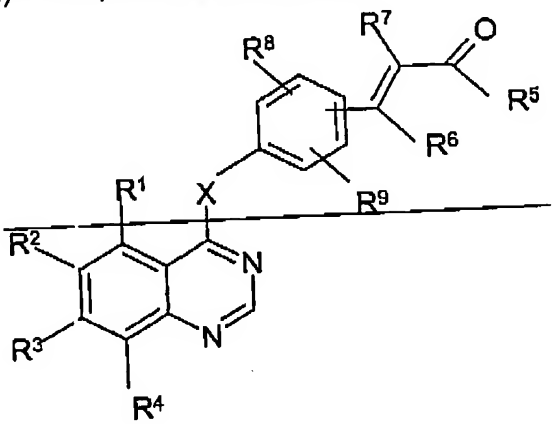
wherein a phosphate ester is a derivative of a hydroxy group present on one or more of R^1, R^2, R^3 or R^4;

wherein functional group refers to reactive substituents selected from nitro, cyano, halo, oxo, $=CR^{76}R^{79}$, $C(O)_kR^{77}$, OR^{77}, $S(O)_kR^{77}$, $NR^{78}R^{79}$, $C(O)NR^{78}R^{79}$, $OC(O)NR^{78}R^{79}$, $=NOR^{77}$,

$-NR^{77}C(O)_xR^{78}$, $-NR^{77}CONR^{78}R^{79}$, $-N=CR^{78}R^{79}$, $S(O)_yNR^{78}R^{79}$ or $-NR^{77}S(O)_yR^{78}$ where R^{77}, R^{78} and R^{79} are independently selected from hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted C_{1-10}alkoxy, or R^{78} and R^{79} together form an optionally substituted ring which optionally contains further heteroatoms such as oxygen, nitrogen, S, S(O) or $S(O)_2$, where x is an integer of 1 or 2, y is 0 or an integer of 1-3; and where optional substituents for hydrocarbyl, heterocyclyl or C_{1-10}alkoxy groups R^{77}, R^{78} and R^{79} as well as rings formed by R^{78} and R^{79} are halo, perhaloC_{1-10}alkyl, mercapto, thioC_{1-10}alkyl, hydroxy, carboxy, C_{1-10}alkoxy, heteroaryl, heteroaryloxy, C_{3-10}cycloalkyl, C_{3-10}cycloalkenyl, C_{3-10}cycloalkynyl, C_{2-10}alkenyloxy, C_{2-10}alkynyloxy, C_{1-10}alkoxyC_{1-10}alkoxy, aryloxy where the aryl group may be substituted by halo, nitro or hydroxy, cyano, nitro, amino, mono- or di-C_{1-10}alkyl amino, oximino or $S(O)_yR^{90}$ where y is as defined above and R^{90} is a C_{1-10}alkyl; and wherein hydrocarbyl is selected from C_{1-10}alkyl, C_{2-10}alkenyl, C_{2-10}alkynyl, aryl, arC_{1-10}alkyl, C_{3-10}cycloalkyl, C_{3-10}cycloalkenyl or C_{3-10}cycloalkynyl; or C_{1-10}alkyl, C_{2-10}alkenyl or C_{2-10}alkynyl substituted with aryl, arC_{1-10}alkyl, C_{3-10}cycloalkyl, C_{3-10}cycloalkenyl or C_{3-10}cycloalkynyl; or an aryl, heterocyclyl, C_{1-10}alkoxy, arC_{1-10}alkyl, C_{3-10}cycloalkyl, C_{3-10}cycloalkenyl or C_{3-10}cycloalkynyl substituted with C_{1-10}alkyl, C_{2-10}alkenyl, C_{2-10}alkynyl or C_{1-10}alkoxy..

2-6. (cancelled)

7. (currently amended) A compound ~~of formula (IA)~~



~~(IA)~~

according to claim 1, or a salt, or phosphate ester ~~or amide~~ thereof; wherein ~~where X is O, or S, S(O) or $S(O)_2$, NH or NR^{40} where R^{40} is hydrogen or C_{1-6}alkyl;~~

~~R^5 is a group OR^{11}, $NR^{12}R^{13}$ or SR^{11} where R^{11}, R^{12} and R^{13} are independently selected from hydrogen, optionally substituted hydrocarbyl or optionally substituted heterocyclic groups, and R^{12} and R^{13} may additionally form together with the nitrogen atom to which they are attached, an aromatic or non-aromatic heterocyclic ring which may contain further heteroatoms, R^8 and R^9 are independently selected from hydrogen, halo, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}alkoxymethyl, di(C_{1-4}alkoxy)methyl, C_{1-4}alkanoyl, trifluoromethyl, cyano, amino, C_{2-6}alkenyl, C_{2-6}alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated, linked via a ring carbon or nitrogen atom, or unsaturated, linked via a ring carbon atom, and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C_{2-4}alkanoyl, C_{1-4}alkanoylamino, C_{1-4}alkoxycarbonyl, C_{1-4}alkylsulphanyl, C_{1-4}alkylsulphinyl, C_{1-4}alkylsulphonyl, carbamoyl, N-C_{1-4}alkylcarbamoyl, N,N-di(C_{1-4}alkyl)carbamoyl, aminosulphonyl, N-C_{1-4}alkylaminosulphonyl, N,N-di(C_{1-4}alkyl)aminosulphonyl, C_{1-4}alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C_{1-4}alkoxycarbonyl, and~~

R^1, R^2, R^3, R^4 are independently selected from, halo, cyano, nitro, trifluoromethyl, C_{1-3}alkyl, $-NR^{14}R^{15}$, wherein R^{14} and R^{15}, which may be the same or different, each represents hydrogen or C_{1-3}alkyl, or $-X^1R^{16}$, wherein X^1 represents a direct bond, -O-, $-CH_2-$, -OCO-, carbonyl, -S-, -SO-, $-SO_2-$, $-NR^{17}CO-$, $-CONR^{18}-$, $-SO_2NR^{19}-$, $-NR^{20}SO_2-$ or $-NR^{21}-$, wherein R^{17}, R^{18}, R^{19}, R^{20} and R^{21} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{16} is selected from one of the following seventeen groups:

1') hydrogen or C_{1-5}alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro or amino;[[,]]

2') C_{1-5}alkylX^2COR^{22}; wherein X^2 represents -O- or $-NR^{23}$-[[,]] in which R^{23} represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{22} represents C_{1-3}alkyl, $-NR^{24}R^{25}$ or $-OR^{26}$, wherein R^{24}, R^{25} and R^{26} which may be the same or different each represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl[])];

3') C_{1-5}alkylX^3R^{27}; wherein X^3 represents -O-, -S-, -SO-, $-SO_2-$, -OCO-, $-NR^{28}CO-$, $-CONR^{29}-$, $-SO_2NR^{30}-$, $-NR^{31}SO_2-$ or $-NR^{32}-$, wherein R^{28}, R^{29}, R^{30}, R^{31} and R^{32} each independently

represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{27} represents hydrogen, C_{1-3}alkyl, cyclopentyl, cyclohexyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms[[,]] selected independently from O, S and N, which C_{1-3}alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C_{1-4}alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-4}alkyl, C_{1-4}hydroxyalkyl and C_{1-4}alkoxy[[)]];

4') C_{1-5}alkylX^4C_{1-5}alkylX^5R^{35}; wherein X^4 and X^5 which may be the same or different are each -O-, -S-, -SO-, $-SO_2-$, $-NR^{36}CO-$, $-CONR^{37}-$, $-SO_2NR^{38}-$, $-NR^{39}SO_2-$ or $-NR^{40}-$, wherein R^{36}, R^{37}, R^{38}, R^{39} and R^{40} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{35} represents hydrogen or C_{1-3}alkyl;

5') R^{41}; wherein R^{41} is a 5-6-membered saturated heterocyclic group, linked via carbon or nitrogen, with 1-2 heteroatoms[[,]] selected independently from O, S and N, which heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-4}alkyl, C_{1-4}hydroxyalkyl, C_{1-4}alkoxy, C_{1-4}alkoxyC_{1-4}alkyl and C_{1-4}alkylsulphonylC_{1-4}alkyl;

6') C_{1-5}alkylR^{41}; wherein R^{41} is as defined hereinbefore;

7') C_{2-5}alkenylR^{41}; wherein R^{41} is as defined hereinbefore;

8') C_{2-5}alkynylR^{41}; wherein R^{41} is as defined hereinbefore;

9') R^{42}; wherein R^{42} represents a phenyl group or a 5-6-membered aromatic heterocyclic group, linked via carbon or nitrogen, with 1-3 heteroatoms selected from O, N and S, which phenyl or aromatic heterocyclic group may carry up to 5 substituents on an available carbon atom selected from hydroxy, halogeno, amino, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}hydroxyalkyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, C_{1-4}hydroxyalkoxy, carboxy, trifluoromethyl, cyano, $-CONR^{43}R^{44}$ and $-NR^{45}COR^{46}$, wherein R^{43}, R^{44}, R^{45} and R^{46}, which may be the same or different, each represents hydrogen, C_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl;

10') C_{1-5}alkylR^{42}; wherein R^{42} is as defined hereinbefore;

11') C_{2-5}alkenylR^{42}; wherein R^{42} is as defined hereinbefore;

12') C_{2-5}alkynylR^{42};wherein R^{42} is as defined hereinbefore;

13') C_{1-5}alkylX^6R^{42}; wherein X^6 represents -O-, -S-, -SO-, $-SO_2-$, $-NR^{47}CO-$, $-CONR^{48}-$, $-SO_2NR^{49}-$, $-NR^{50}SO_2-$ or $-NR^{51}-$, wherein R^{47}, R^{48}, R^{49}, R^{50} and R^{51} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

14') C_{2-5}alkenylX^7R^{42}; wherein X^7 represents -O-, -S-, -SO-, $-SO_2-$, $-NR^{52}CO-$, $-CONR^{53}-$, $-SO_2NR^{54}-$, $-NR^{55}SO_2-$ or $-NR^{56}-$, wherein R^{52}, R^{53}, R^{54}, R^{55} and R^{56} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

15') C_{2-5}alkynylX^8R^{42}; wherein X^8 represents -O-, -S-, -SO-, $-SO_2$-, $-NR^{57}CO$-, $-CONR^{58}$-, $-SO_2NR^{59}$-, $-NR^{60}SO_2$- or $-NR^{61}$-, wherein R^{57}, R^{58}, R^{59}, R^{60} and R^{61} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore;

16') C_{1-3}alkylX^9C_{1-3}alkylR^{42}; wherein X^9 represents -O-, -S-, -SO-, $-SO_2$-, $-NR^{62}CO$-, $-CONR^{63}$-, $-SO_2NR^{64}$-, $-NR^{65}SO_2$- or $-NR^{66}$-, wherein R^{62}, R^{63}, R^{64}, R^{65} and R^{66} each independently represents hydrogen, C_{1-3}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{42} is as defined hereinbefore; and

17') C_{1-3}alkylX^9C_{1-3}alkylR^{41}; wherein X^9 and R^{41} are as defined hereinbefore;

and R^6 and R^7 are hydrogen or C_{1-4} alkyl.

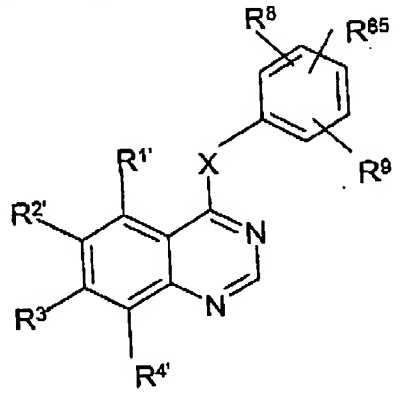
8. (currently amended) A compound according to claim 7, or a salt or phosphate ester, thereof wherein R^6 and R^7 are hydrogen.

9. (cancelled)

10. (currently amended) A compound according to claim 1 [[6]] or a salt or phosphate ester thereof, wherein R^5 is selected from a group OR^{11} where R^{11} is hydrogen or C_{1-4}alkyl; or a group $NR^{12}R^{13}$ where one of R^{12} or R^{13} is hydrogen and the other is optionally substituted C_{1-6}alkyl, optionally substituted aryl or optionally substituted heterocyclyl, or R^{12} and R^{13} together with the nitrogen atom to which they are attached form a heterocyclic ring.

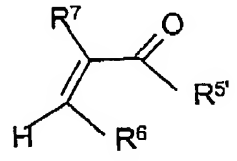
11. (previously presented) A compound according to claim 10, which is a phosphate ester of a compound of formula (I).

12. (currently amended) A method for preparing a compound of formula (I) as defined in claim 1 which method comprises reacting a compound of formula (II)



(II)

where X, R^8 and R^9 are as defined in claim 1, $R^{1'}$, $R^{2'}$, $R^{3'}$, $R^{4'}$ are groups R^1, R^2, R^3, R^4 as defined in claim 1 respectively; and R^{85} is a leaving group, with a compound of formula (III)



(III)

where R^6 are R^7 are as defined in claim 1 and $R^{5'}$ is a group R^5 as defined in claim 1.

13. (cancelled)

14. (currently amended) A method for treating colorectal or breast cancer in a warm blooded animal, in need of such treatment, which comprises administering to said animal an effective amount of a compound of formula (I), or a salt[[,]] or phosphate ester~~, or amide~~ thereof.

15. (currently amended) A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1, or a salt[[,]] or phosphate ester~~, or amide~~ thereof, in combination with a pharmaceutically acceptable carrier.

16. (currently amended) A compound according to claim 10, or a salt[[,]] or phosphate ester ~~or amide~~ thereof; where

R^5 is a group OR^{11}, $NR^{12}R^{13}$ or SR^{11} where R^{11} is hydrogen or C_{1-4}alkyl, and where one of R^{12} and R^{13} is hydrogen and the other is C_{1-6}alkyl optionally substituted with one or more groups selected from hydroxy, trifluoromethyl, C_{1-3}alkoxy, cyano, amino, mono- or di-C_{1-4}alkylamino, C_{1-4}alkylthio, C_{3-6}cycloalkyl or heterocyclyl optionally substituted with C_{1-4}alkyl; or one of R^{12} and R^{13} is hydrogen and the other is a heterocyclic group as well as dioxides thereof, C_{3-6}cycloalkyl or a phenyl group any of which may be substituted with one or more groups selected from halo, nitro, C_{1-4}alkyl or C_{1-4}alkoxy, and R^{12} and R^{13} may additionally form together with the nitrogen atom to which they are attached, morpholine or piperidine;[[,]]

R^6 and R^7 are independently selected from hydrogen or C_{1-4}alkyl;

R^8 and R^9 are independently selected from hydrogen, halo, C_{1-4} alkoxy, trifluoromethyl, cyano or phenyl.

17. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein X is NH or O.

18. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein

R^1 is hydrogen;[[,]]

R^2 is halo, cyano, nitro, trifluoromethyl, C_{1-3}alkyl, $-NR^{14}R^{15}$, wherein R^{14} and R^{15}, which may be the same or different, each represents hydrogen or C_{1-3}alkyl, or a group $-X^1R^{16}$ where X^1 is oxygen and R^{16} is a group (1); ~~as defined in claim 6,~~

R^3 is a group $-X^1R^{16}$ where X^1 is oxygen and R^{16} is a group selected from group (1), (3), (6) and (10); ~~as defined in claim 6~~

and R^4 is hydrogen, halo, C_{1-4}alkyl, or C_{1-4}alkoxy;

wherein group (1) is hydrogen or C_{1-5}alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, oxiranyl, fluoro, chloro, bromo, amino, C_{1-3}alkyl and trifluoromethyl;

group (3) is $-R^bX^3R^{27}$; wherein X^3 represents -O-, C(O) -S-, -SO-, $-SO_2-$, -OC(O)-, $-NR^{28}C(O)-$, $-NR^{28}C(O)O-$, $-C(O)NR^{29}-$, C(O)()$NR^{29}-$, $-SO_2NR^{30}-$, $-NR^{31}SO_2-$ or $-NR^{32}-$ wherein R^{28}, R^{29}, R^{30}, R^{31} and R^{32} each independently represents hydrogen, C_{1-3}alkyl, hydroxy C_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and R^{27} represents hydrogen, C_{1-6}alkyl, C_{2-6}alkenyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C_{1-6}alkyl group may bear 1, 2 or 3 substituents selected from oxo, hydroxy, halogeno, cyclopropyl, amino, C_{1-4}alkylamino, C_{1-4}alkanoyldi-C_{1-4}alkylamino, C_{1-4}alkylthio, C_{1-4}alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4}cyanoalkyl, C_{1-4}alkyl, C_{1-4}hydroxyalkyl, C_{1-4}alkoxy, C_{1-4}alkoxyC_{1-4}alkyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy and a group $-(-O-)_f(R^{b'})_gD$, wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C_{3-6}cycloalkyl group, an aryl group or a 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo or C_{1-4}alkyl;

group (6) is $-R^dR^{41}$; wherein R^{41} is a 4-6-membered cycloalkyl or saturated heterocyclic ring, linked via carbon or nitrogen with 1-2 heteroatoms selected independently from O, S and N, which cycloalkyl or heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy,

halogeno, cyano, C_{1-4}alkyl, hydroxyC_{1-4}alkyl, cyanoC_{1-4}alkyl, cyclopropyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, carboxamido, C_{1-4}aminoalkyl, C_{1-4}alkylamino, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, C_{1-4}alkanoyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy nitro, amino, C_{1-4}alkoxy, C_{1-4}hydroxyalkoxy, carboxy, trifluoromethyl, $-C(O)NR^{43}R^{44}$, $-NR^{45}C(O)R^{46}$ wherein R^{43}, R^{44}, R^{45} and R^{46} which may be the same or different, each represents hydrogen, C_{1-4}alkyl, hydroxyC_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and a group $-(-O-)_f(C_{1-4}alkyl)_g$ringD, wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C_{3-6}cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl; group (10) is $-R^gR^{42}$ wherein R^{42} represents a phenyl group or a 5-6-membered aromatic heterocyclic group, linked via carbon or nitrogen, with 1-3 heteroatoms selected from O, N and S, which phenyl or aromatic heterocyclic group may carry up to 5 substituents selected from hydroxy, nitro, halogeno, amino, C_{1-4}alkyl, C_{1-4}alkoxy, C_{1-4}hydroxyalkyl, C_{1-4}aminoalkyl, C_{1-4}alkylamino, C_{1-4}hydroxyalkoxy, oxo, cyanoC_{1-4}alkyl, cyclopropyl, C_{1-4}alkylsulphonylC_{1-4}alkyl, C_{1-4}alkoxycarbonyl, di(C_{1-4}alkyl)amino, C_{1-4}alkylaminoC_{1-4}alkyl, C_{1-4}alkanoyl, di(C_{1-4}alkyl)aminoC_{1-4}alkyl, C_{1-4}alkylaminoC_{1-4}alkoxy, di(C_{1-4}alkyl)aminoC_{1-4}alkoxy, carboxy, carboxamido, trifluoromethyl, cyano, $-C(O)NR^{69}R^{70}$, $-NR^{71}C(O)R^{72}$, wherein R^{69}, R^{70}, R^{71} and R^{72}, which may be the same or different, each represents hydrogen, C_{1-4}alkyl, hydroxyC_{1-4}alkyl or C_{1-3}alkoxyC_{2-3}alkyl, and a group $-(-O-)_f(C_{1-4}alkyl)_g$ringD wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C_{3-6}cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4}alkyl; and R^b, $R^{b'}$, R^d and R^g are independently selected from C_{1-6}alkylene groups optionally substituted by one or more substituents selected from hydroxy, halogeno, amino.

19. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein R^2 and R^3 are independently methoxy or 3,3,3-trifluoroethoxy.

20. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein R^3 is 3-morpholinopropoxy.

21. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein R^8 and R^9 are both hydrogen.

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22. (currently amended) A compound according to claim 16, or a salt or phosphate ester thereof, wherein R^6 and R^7 are both hydrogen.

23. (new) A compound according to claim 1 or a salt or phosphate ester thereof wherein X is NH or O.

24. (new) A compound according to claim 1 or a salt or phosphate ester thereof wherein R^6 and R^7 are independently hydrogen or C_{1-4}alkyl.

25. (new) A compound according to claim 1 or a salt or phosphate ester thereof wherein R^8 and R^9 are independently hydrogen, halo, C_{1-4}alkoxy, cyano, trifluoromethyl or phenyl.